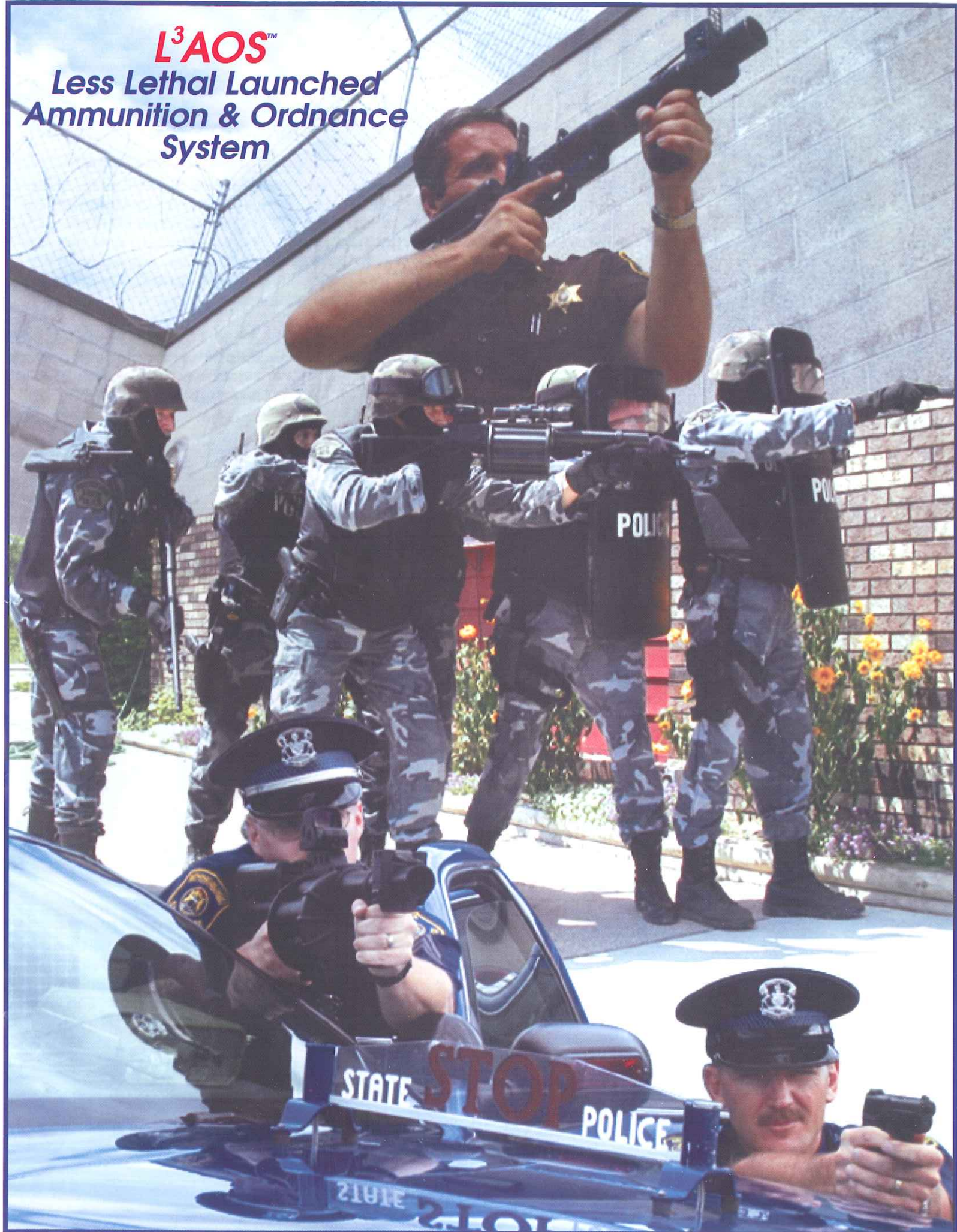


L³AOS™

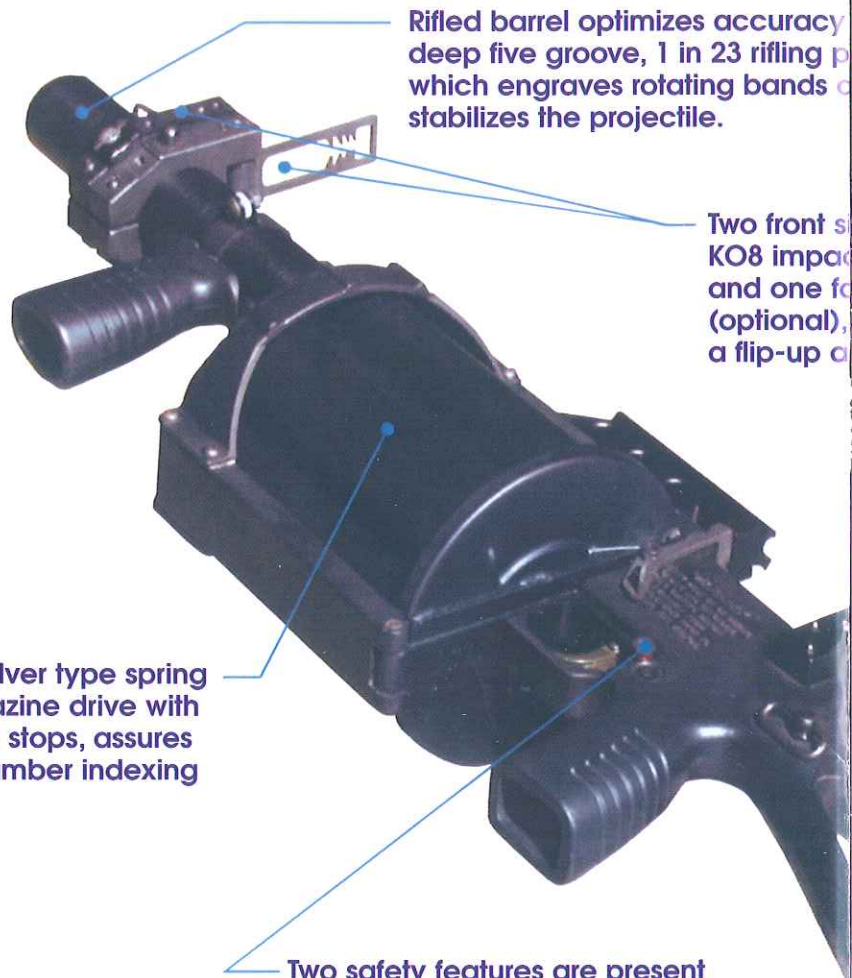
**Less Lethal Launched
Ammunition & Ordnance
System**



L³AOS - Less Lethal Launched Ammunition & Ordnance System



In today's environment with issues of excessive use of force and wrongful death the law enforcement professional must act responsibly and still carry a big stick. With those criteria in mind Sage International, Ltd. and Sage Control Ordnance, Inc. have developed an effective system to employ less lethal force in critical situations. Starting with the intimidating look of our 37mm projectile launchers and a complete family of ammunition, you have the ability to neutralize a single subject or to control a crowd.



Rifled barrel optimizes accuracy, deep five groove, 1 in 23 rifling pattern which engraves rotating bands and stabilizes the projectile.

Two front sight rings, KO8 impact and one for (optional), a flip-up aperture.

Unique revolver type spring motor magazine drive with mechanical stops, assures positive chamber indexing

Two safety features are present on each SL-6 Launcher: A push type trigger block safety and an "out of alignment" safety, which prevents firing unless the cylinder is lined up with the firing pin.



SL-1 Single Shot Projectile Launcher

Technical Specifications

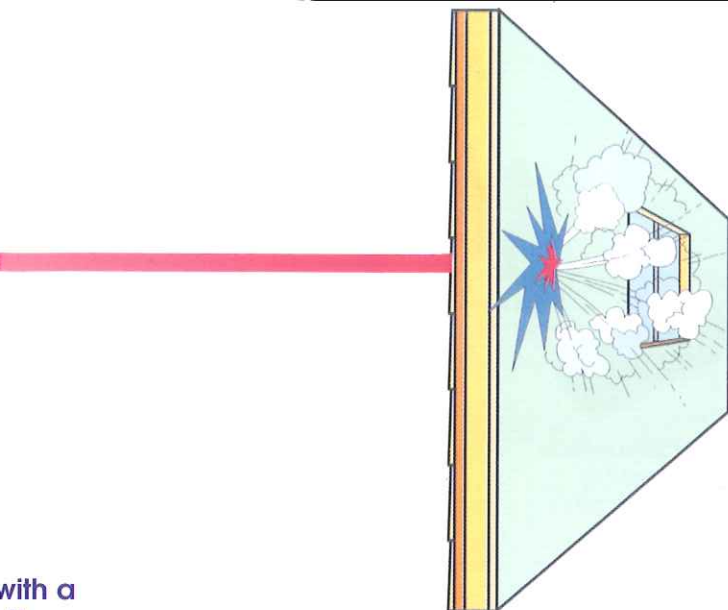
Action Type	Break open, single shot
Caliber	1.5" (37mm)
Overall Length	28" (70cm)
Barrel Length	10.5" (26.25cm) five groove rifled
Ammunition Type	All Sage Control Ordnance or ARWEN types
Weight	6.5 lbs. (2.9kg)
Range	Maximum effective range - 100 meters
Safety	Push type trigger block
Sights	Front, flip-up with ballistic ladder 20-100 meters at 20 meter increments. Rear, flip-up with aperture. Optional twin weaver rails on front sight ring



SL-6 Multi-Role Projectile Launcher

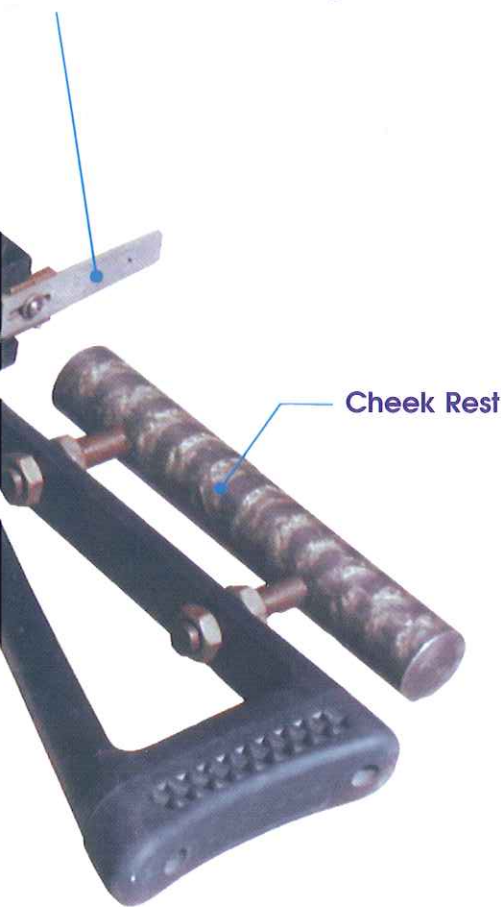
Technical Specifications

Action Type	Revolver, semi-automatic
System of Operation	Revolver type spring motor drive magazine, mechanically operated magazine stops
Caliber	1.5" (37mm)
Overall Length	33" (83.8cm)
Barrel Length	10.5" (26.25cm) five groove rifled
Ammunition Type	All Sage Control Ordnance or ARWEN types
Capacity	6 Shots
Weight	10.6 lbs. (4.8kg)
Range	Maximum effective range - 100 meters
Safety	Push type trigger block and out of alignment firing pin
Sights	Front, flip-up with ballistic ladder 20-100 meters at 20 meter increments. Rear, flip-up with aperture. Optional twin weaver rails on front sight ring



with a
pattern,
and spin

ighting systems: One for KO1, KO3 and
t ammunition (standard with the weapon)
r BP5 barricade penetrating ammunition
calibrated in 20 meter increments and
adjustable rear aperture sight are offered.



Cheek Rest

Barricade Penetrator

Projectile Type	Payload
#1- BP5LPCS	- CS Powder
#2- BP5CS	- CS Powder
#3- BP5LOCS	- CS Powder
#4- BP5OC	- CS Powder
#5- BP5LPP	- Inert Powder
#6- BP5P	- Inert Powder

Caliber 37mm
Projectile Weight 2.2oz / 62.4gm
Agent Weight 5 grams - CS
Discharge Time Upon Impact
Fuse Delay Time None
Dissemination Impact Initiation
Method Non-Pyrotechnic
Practice Ammunition Types BP5LPP & BP5P

#1, 3 & 5 #2, 4 & 6

Muzzle Velocity 185fps / 56.4mps 450fps / 137.2mps

Maximum Effective Range 21.9yds / 20m 87.5yds / 80m

The BP5CS, BP5OC and BP5P projectile utilizes a special hard plastic penetrator ring which "cookie cutters" its way thru doors and windows. Upon impact a thin frangible disc fractures, the projectile continues to penetrate and the potent payloads of high concentration micro-pulverized CS and OC dust are disseminated.

Muzzle Blast

Projectile Type	Payload
#1- BKO6CS	- CS Powder
#2- KO6OC	- CS Powder
#3- KO6P	- CS Powder

Caliber 37mm
Projectile Weight Not Applicable
Agent Weight 35 grams - CS
Discharge Time Instantaneous
Fuse Delay Time None
Dissemination Muzzle Dispersion
Method Non-Pyrotechnic
Practice Ammunition Types KO6P

#1, 2 & 3

Muzzle Velocity Not Applicable

Maximum Effective Range 30 ft / 9.1m

For close range area denial use the the KO6 cartridge can disperse large volumes of micro-pulverized CS or OC irritant powder out to ranges of 30 feet.

Irritant Smoke

Projectile Type	Payload
#1- KO2SRCS	- CS Smoke
#2- KO2LRCS	- CS Smoke
#3- KO2SRP	- Inert Smoke
#4- KO2LRP	- Inert Smoke

Caliber 37mm
Agent Weight 16 grams
Discharge Time 17 to 22 Second
Fuse Delay Time 1 Second
Dissemination Ignition upon Firing
Method Pyrotechnic
Practice Ammunition Types KO2LRP & KO2SRP

#1 & 3 #2 & 4

Muzzle Velocity 125fps / 38.1mps 177fps / 53.9mps

Maximum Effective Range 75yds / 68.6m 150yds / 137.2m

Upon firing, the fuse train is activated and a single CS smoke emitting canister is ignited. Once flight trajectory is complete the canister continues to burn, emitting CS irritant smoke.

Low Toxicity Screening Smoke

Projectile Type	Payload
#1- KO4SR	- White-Low Toxicity Smoke
#2- KO4LR	- White-Low Toxicity Smoke

Caliber 37mm
Agent Weight None
Discharge Time 17 to 22 Seconds
Fuse Delay Time 1 Second
Dissemination Ignition upon Firing
Method Pyrotechnic
Practice Ammunition Types None

#1 #2

Muzzle Velocity 125fps / 38.1mps 177fps / 53.9mps

Maximum Effective Range 75yds / 68.6m 150yds / 137.3m

Upon firing, the fuse train is activated and the single smoke emitting canister is ignited. Once flight trajectory is complete it continues to burn, emitting low toxicity screening smoke.



Sage Control Ordnance, Inc. was founded in 1991 with the mission to establish a domestic source of accurate 37mm less lethal ammunition: compatible with existing 37mm rifled barrel systems. From an initial offering of one type of ammunition Sage Control Ordnance, Inc. now manufactures twenty-eight variations of eight different types of ammunition.



Projectile Type	Payload
#1- KO3LECS	- CS Powder
#2- KO3CS	- CS Powder
#3- BP5LPOC	- OS Powder
#4- KO3LEP	- OS Powder
#5- BP5LLP	- Inert Powder
#6- KO3P	- Inert Powder

Caliber 37mm
 Projectile Weight 2.7oz / 76.5gm
 Agent Weight 3 grams - CS
 Discharge Time Upon Impact
 Fuse Delay Time None
 Dissemination Method Burst upon Impact
 Practice Ammunition Types Non-Pyrotechnic KO3LEP & KO3P

Practice Ammunition Types

#1, 3 & 5 #2, 4 & 6

Muzzle Velocity 175fps / 53.3mps 240fps / 73.2mps

Maximum Effective Range 21.9yds / 20m 54.7yds / 50m

The KO3 family of ammunition is a combination blunt trauma and chemical agent cartridge. Upon impact the projectile imparts blunt trauma, equal to that of either the K1 or KO1LE baton. In addition a Styrofoam cap forming the end of the projectile is crushed, releasing either CS or OC micro-pulverized powder. The dissemination of the powder is in a circle of about 3' in diameter, centered at the point of impact.

Kinetic Energy Baton



Projectile Type	Payload
#1- KO1LE	- Polyurethane
#2- KO1	- Polyurethane

Caliber 37mm
 Projectile Weight 2.7oz / 76.5gm
 Agent Weight None
 Discharge Time None
 Fuse Delay Time None
 Dissemination Method Impact
 Practice Ammunition Types None

#1 #2

Muzzle Velocity 175fps / 53.3mps 240fps / 73.2mps

Maximum Effective Range 21.0yds / 20m 109.4yds / 100m

The KO1 Baton family utilizes a tadpole design which when matched with an aggressive 1 in 23 RH twist rifling pattern gives exceptional accuracy and can deliver specific increments of blunt trauma energy to the target. KO1 and KO1LE baton ammunition can be reloaded for low cost training, multiple times and with a minimal loss in accuracy and velocity.

Super Soft Tip Kinetic Energy Baton



Projectile Type	Payload
#1- KO8SSTLE	- Soft Polyurethane
#2- KO8SST	- Soft Polyurethane

Caliber 37mm
 Projectile Weight 2.7oz / 76.5gm
 Agent Weight None
 Discharge Time None
 Fuse Delay Time None
 Dissemination Method Impact
 Practice Ammunition Types None

#1 #2

Muzzle Velocity 175fps / 53.3mps 240fps / 73.2mps

Maximum Effective Range 21.0yds / 20m 109.4yds / 100m

The KO8 is a variant of the KO1 type baton employing a soft expandable impact surface. The baton, upon impact, spreads the kinetic energy over a large area. Three variations are available. The KO8 Super Soft Tip cartridge case can be reloaded for training.

Multi-Ball Area Impact



Projectile Type	Payload
#1- KO7-34	- 34 Cal Rubber Balls
#2- KO7-60	- 60 Cal Rubber Balls

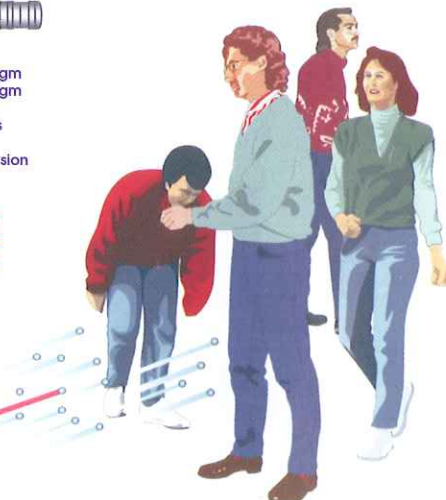
Caliber 37mm
 Projectile Weight #1-.01oz / .28gm
 #2-.08oz / .28gm
 Agent Weight None
 Discharge Time Instantaneous
 Fuse Delay Time None
 Dissemination Method Muzzle Dispersion
 Practice Ammunition Types None

#1 #2

Muzzle Velocity 310fps / 94.5mps 240fps / 73.2mps

Maximum Effective Range 100ft / 30.5m 150ft / 45.7m

The KO7-34 and KO7-60 Multi-Ball Area Impact Ammunition is designed to be skip fired and impact multiple subjects below the waist.





Tactical Sling
Part # **SSL37**



**Sage/Simunition®
Trainer (1)**
Part # **SCC37/1**



**Sage/Simunition®
Trainer (1)**
Part # **SCC37/1**

Reloading Components & Equipment for Low Cost Training

KO1 Batons
Part # **KO1-B**



**KO1 Empty
Cartridges**
Part # **KO1-CC**



**KO1 Baton
Cap Ends**
Part # **KO1-EC**



**Replacement
Rotating Bands**
Part # **RB-1**

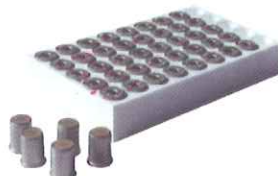


Reloading Die Kit
Part # **RDK**

**Cleaning
Brush**
Part # **CBR37**



Propelling charge
Part # **KO1PC & KO1LEPC**



**Fired Propelling
Charge Containment
Steel Box**
Part # **RDB850**



Lee hand Press
Part # **RLP**



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CAT. NO. L'AOS 0207-K2

@Simunition is a registered trademark

Box Magazine, 37mm, Rifled,

BML-37

Multi-Role, Launching Platform

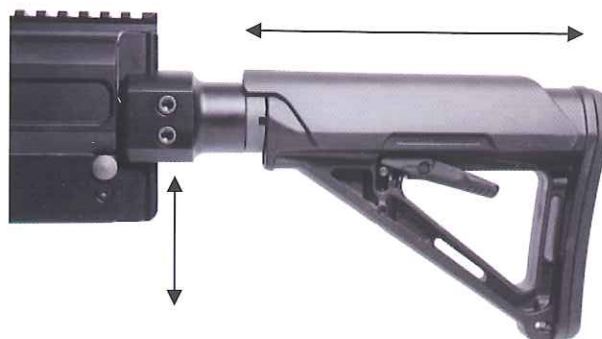


BML-37: Light weight, narrow width, robustly constructed four (4) shot, box magazine, semi-automatic, rifled barrel, 37mm, projectile launching platform. Nine (9) ammunition types available. Ammunition performance meets or exceeds comparable types. Easily converted to single shot configuration. (EoTech sight not included)



The BML-37 has two safeties: The first type of safety is a cross bolt type. The cross bolt safety is located above the trigger for ease of use and is similar in operation to most Police/Military shotguns.. The second safety is an out of alignment safety whereby the firing pin is not aligned with the primer until the firing pin is ready to be released to impact the primer. Trigger manipulation is accomplished using two fingers.

The BML-37 butt stock assembly adjusts upward and downward to compensate for different sighting applications. The butt stock is adjustable fore and aft for length of pull and can accept risers for additional height if necessary.





The BML-37 is loaded from the top of the launcher through the chamber/ejection port into a box magazine. Upon firing the fired cartridge case is automatically ejected. Ejection of the fired cartridge case can be adjusted to accommodate left or right handed shooters. There is no necessity for additional magazines since launcher capacity can be kept full by a simple "topping up" regime. The magazine can be removed for cleaning and service.

Accessories:



- Cleaning Brushes
- Single Point Slings
- Dual Point Tactical Slings
- EoTech Electronic Sights
- Hard Carrying Cases
- Armorer Training Course



Technical Specifications:

- Weight with magazine installed: 7.6 lbs (3.5 Kg)
- Magazine capacity: Four (4) rounds
- Rate of fire: Four (4) rounds in 10 seconds
- Overall height: 10 1/4" (26 cm)
- Overall length w/butt stock collapsed: 33" (84 cm)
- Thickness at widest point: 2 1/4" (5.7 cm)

Sage Control Ordnance, Inc.

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United States of America

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www.sageinternationaltd.com



KO41-40mm

- Kinetic Energy
- Rigid Tip

Baton Ammunition



Features:

- Designed to be used to incapacitate non-compliant aggressive persons
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage re-loadable Hi-Lo propulsion system.
- Projectiles are reusable up to seven times.
- 76.5 gram spin stabilized projectile
- Three energy levels are available:
 - Standard Energy
 - Mid-Range Energy
 - Less Energy
- Highly accurate out to 60 meters with high hit probability at longer distances
- Ammunition is re-loadable multiple times for "Cost Effective" training.
- M212 plastic cartridge case: low risk of officer being injured due to perpetrator throwing the cartridge case back at the officer.

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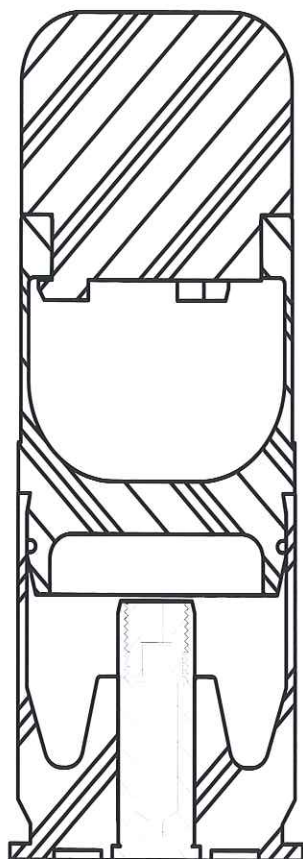


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Technical Data Sheet

Model No	Stock No	Description
KO41-PCC	100176P	Cartridge, KO41 Impact Baton, Standard Energy w/Plastic CC
KO41MR-PCC	100180P	Cartridge, KO41 Impact Baton, Mid-Range Energy w/Plastic CC
KO41LE-PCC	100175P	Cartridge, KO41 Impact Baton, Less-Energy w/Plastic CC



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Impact Baton with plastic cartridge case
- **Model Number:** KO41-PCC
KO41MR-PCC
KO41LE-PCC
- **Type:** Spin stabilized Kinetic Energy Impact Baton
- **Velocity:** KO41-237 fps (72.2 mps)
KO41MR-209 fps (63.7 mps)
KO41LE-170 fps (51.8 mps)
- **Range:** KO41-100 meters
KO41MR-40 meters
KO41LE-20 meters
- **Cartridge Case Material:** Plastic M212-Modified
- **Projectile Weight:** 76.5 grams
- **Projectile Material:** Polyurethane ogive, plastic body with integral rotating band
- **Cartridge Overall Height:** 122.43mm
- **Cartridge Overall Weight:** 111.4 grams
- **Compatibility:** Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Deployment:** Most effective ranges are between 1 meter and 100 meters. It is stressed that shot placement is the most important aspect in the deployment and shot placement will determine the extent of injury caused. Shots to the head, neck, thorax, heart and spine can cause death or serious injury.

SHIPPING INFORMATION

- **UN Number:** UN0012
- **Proper Shipping Name:** Cartridges for Weapons, Inert Projectile or Cartridges, Small Arms
- **Hazard Classification:** 1.4S
- **Quantity Per Package:** 25
- **Total Package Weight:** 6.1 kg.
- **Package Type:** Cardboard-Individual Round and Cardboard Master Pack (24) POP
- **Package Dimensions:** 10-3/4" Long x 9-3/4" Wide x 6" Deep



KO42-40mm -Irritant CS -Inert Practice Smoke Ammunition



Features:

- Designed to be used to deny specific outdoor area occupation and to relocate or move unruly crowds.
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage Hi-Lo propulsion system
- Smoke emission time: 25 +/- 5 seconds.
- Two (2) ammunition variants available:
 - CS Irritant
 - Practice-Inert
- Two engagement ranges for both ammunition variants are available:
 - Short range-75 yards (68.6m)
 - Long range-150 yards (137.1m)
- Highly accurate at given performance ranges.
- Smoke projectile has delayed ignition to provide more smoke affect at the desired target.
- Cartridge case is full-length, aluminum-4.8 inches (121.9mm) long.

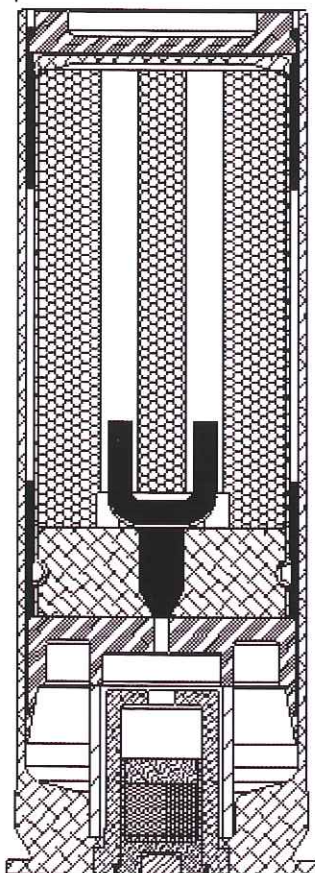
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Technical Data Sheet

Model No	Stock No	Description
KO42SRCS	100181	Cartridge, KO42CS, Irritant Smoke, Short Range
KO42LRCS	100182	Cartridge, KO42CS, Irritant Smoke, Long Range
KO42SRP	100183	Cartridge, KO42SRP, Practice Irritant Smoke (Inert), Short Range,
KO42LRP	100184	Cartridge, KO42LRP, Practice Irritant Smoke (Inert), Long Range,



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Irritant Smoke Long and Short Range, Active Irritant CS and/or Practice (Inert)
- **Model Numbers:** KO42SRCS, KO42LRCS, KO42SRP and KO42LRP
- **Type:** Burning Irritant Smoke, CS and Practice Variants-Single Source Projectile
- **Propellant:** Smokeless
- **Effective Ranges:** Short Range: 75 yards (68.9 meters)
Long Range: 150 yards (137.8 meters)
- **Discharge Time:** 20 seconds +/- 5 seconds
- **Cartridge Case Material:** Aluminum
- **Projectile Weight:** Irritant CS-3.5 oz (100 grams)
Practice (Inert)-3.5 oz (100 grams)
- **Cartridge Overall Height:** 4.800 inches (121.92mm)
- **Cartridge Overall Weight:** 7.3 oz (207 grams)
- **Compatibility:** Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Application.** This ammunition is less lethal ammunition used to disperse crowds or to deny entry into sensitive areas by hostile intruders. Each projectile contains pyrotechnic compound of irritant CS or inert practice smoke. When fired the entire pyrotechnic mixture is ignited through a delay system and is carried to its effective range. Upon landing full ignition is in progress. The recommended method of firing is to elevate the muzzle approximately 20-25 degrees above the horizontal to achieve desired effective range for the specific ammunition type fired. Under no circumstances should the impact of the end cap be above the waist of a perpetrator.

SHIPPING INFORMATION

KO42SRCS and KO42LRCS

- UN Number: UN0301
- Proper Shipping Name: Ammunition, Tear Producing
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 5 kg.
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter-12 inches (304.8 mm), Height-7.5 inches (190.5 mm)



KO44-40mm

-Screening -Practice Smoke Ammunition



Features:

- Designed to be used to:
 - Simulate pyrotechnic CS ammunition for training.
 - Screening for tactical operations.
 - Color coded signaling.
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage Hi-Lo propulsion system.
- Available colors: White, Blue, Red, Yellow, Green, Orange, Violet.
- Projectile containing payload has delayed ignition to provide more smoke affect at the desired target.
- Three engagement ranges for all types of ammunition are available:
 - Short range - 75 yards (68m)
 - Mid range - 150 yards (137m)
 - Long range - 200 yards (183m)
- Highly accurate at given performance ranges.
- Cartridge case is full-length aluminum - 4.8 inches (122mm).
- Smoke emission time: 25 +/- 5 sec.

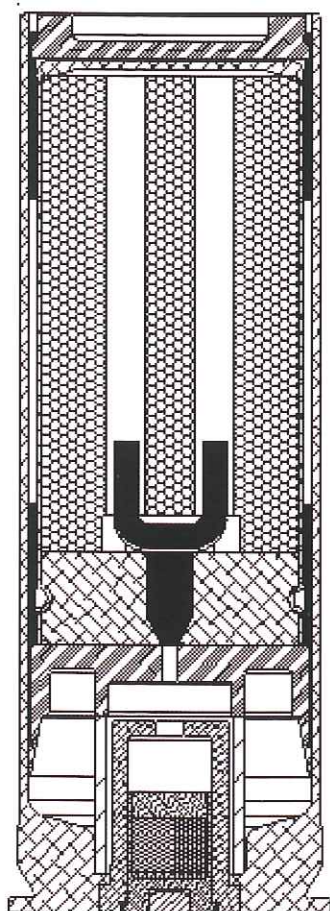
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Technical Data Sheet

Model No	Stock No	Description
KO44SRP	100183	Cartridge, 40mm, KO44SR, Low Toxicity Screening Smoke, Short Range
KO44LRP	100184	Cartridge, 40mm, KO44LR, Low Toxicity Screening Smoke, Long Range



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Smoke Long and Short Range
- **Model Numbers:** KO44SRP and KO44LRP
- **Type:** Burning Smoke, Single Source Projectile
- **Propellant:** Smokeless
- **Effective Ranges:** Short Range: 75 yards (68.9 meters)
Long Range: 150 yards (137.8 meters)
- **Discharge Time:** 25 seconds +/- 5 seconds
- **Cartridge Case Material:** Aluminum
- **Projectile Weight:** 4.6 oz (131 grams)
- **Chemical Weight:** 3.0 oz (86 grams)
- **Cartridge Overall Height:** 4.800 inches (121.92mm)
- **Cartridge Overall Weight:** 7.3 oz (207 grams)
- **Compatibility:** Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Colors available:** White, Blue, Red, Yellow, Green, Orange, Violet
- **Application.** This ammunition is less lethal ammunition used to disperse crowds or to deny entry into sensitive areas by hostile intruders. Each projectile contains pyrotechnic compound of smoke. When fired the entire pyrotechnic mixture is ignited through a delay system and is carried to its effective range. Upon landing full ignition is in progress. The recommended method of firing is to elevate the muzzle approximately 20-25 degrees above the horizontal to achieve desired effective range for the specific ammunition type fired. Under no circumstances should the impact of the end cap be above the waist of a perpetrator.

SHIPPING INFORMATION

KO44SR and KO44LR

- UN Number: UN0303
- Proper Shipping Name: Ammunition, smoke
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 5 kg.
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter-12 inches (304.8 mm), Height-7.5 inches (190.5 mm)



BP45-40mm -CS, OC & Inert -Barricade Penetrating Ammunition



Features:

- Designed to be used to penetrate windows, doors and barriers. Powder is released upon impact and the fracture of the frangible end cap disc.
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage Hi-Lo propulsion system
- Cartridge case is a standard length Mil -Spec dimension 40mm "short case"
- Payload: Five (5.0) grams of all powder formulations.
- Three (3) powder variants available:
 - CS Irritant
 - OC Inflammatory
 - Practice Inert
- Non-pyrotechnic
- Accurate out to 80 meters
- Projectile containing chemical powder payload can penetrate ½ inch (12mm) at 40 meters

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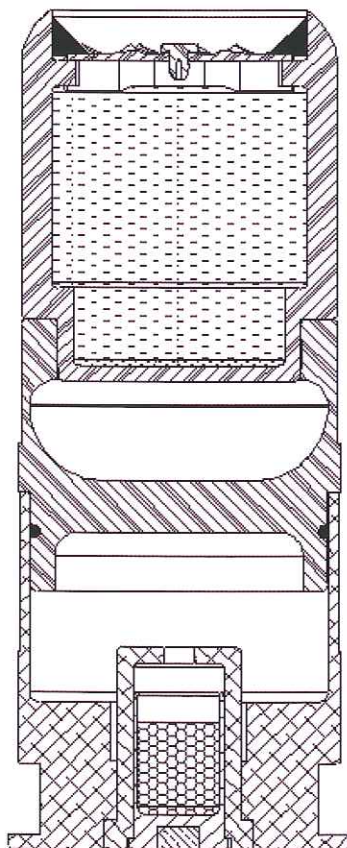


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Technical Data Sheet

Model No:	Stock No:	Description:
BP45CS	100185	Cartridge, 40mm, CS, Barricade Penetrating
BP45OC	100186	Cartridge, 40mm, OC, Barricade Penetrating
BP45P	100187	Cartridge, 40mm, Practice (Inert) Barricade Penetrating



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Barricade Penetrating
- **Model Number:** BP45CS, BP45OC and BP45P
- **Type:** Spin stabilized barricade penetrating CS powder and inert practice
- **Velocity:** 422 feet per second (128.6 meters/second)
- **Range:** 1-80 meters
- **Cartridge Case Material:** Aluminum
- **Projectile Weight:** 2.3 oz (65.0 grams)
- **Projectile Material:** Nylon body with integral rotating band, nylon ogive penetrator, and frangible plastic agent retention disc
- **Chemical Weight:** 5 grams
- **Cartridge Overall Height:** 4.3 inches (108.1mm)
- **Cartridge Overall Weight:** 4.8 oz (134.7 grams)
- **Compatibility:** Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Deployment:** Penetrates hard targets such as car windscreens, windows and some wood doors. Upon impact the projectile penetrates the target material and releases its payload of CS, OC or Inert powder. Penetrates: 12mm thick plywood at 40 meters from the muzzle.

SHIPPING INFORMATION

BP45CS and BP45OC Variants

- UN Number: UN0301
- Proper Shipping Name: Ammunition, Tear Producing
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 5 kg.
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter-304.8mm
- Height-190.5mm



KO46-40mm

- Chemical Agent
- Muzzle Blast

Ammunition



Features:

- Designed to be used to deny entry into sensitive areas or to relocate or disperse unruly groups or hostile intruders.
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage Hi-Lo propulsion system
- Non-pyrotechnic
- Payload is dispensed at the weapon's muzzle into a large cloud and travels approximately 30 feet (9.1m).
- Three (3) variants available:
 - CS Irritant
 - OC Inflammatory
 - Practice-Inert
- Cartridge case is full-length aluminum-4.8 inches (121.9mm) long.

Sage Control Ordnance, Inc.

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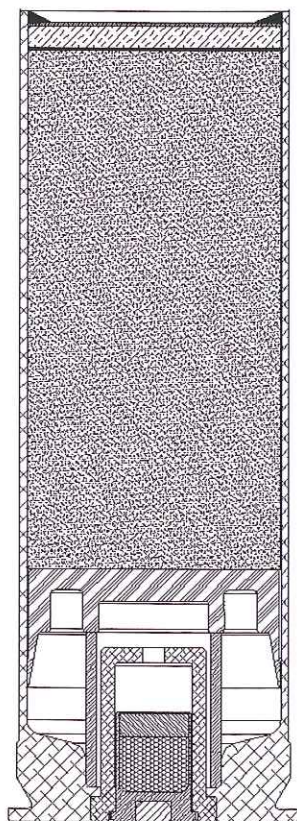


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Technical Data Sheet

Model No	Stock No	Description
KO46CS	100180	Cartridge, KO46CS, Muzzle Blast CS, Irritant
KO46OC	100181	Cartridge, KO46OC, Muzzle Blast CS, Inflammatory
KO46P	100182	Cartridge, KO46P, Muzzle Blast, Practice



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Muzzle Blast
- **Type:** Muzzle Blast: Expulsion of CS, OC or Inert Powder at the muzzle of the launcher
- **Propellant:** Smokeless
- **Maximum Effective Range:** 25 to 30 feet (7.6 to 9.1 meters)
- **Cartridge Case Material:** Aluminum
- **Chemical Payload Weight:** CS: 1.1 oz (30.7 grams)
OC: 0.20 oz (5.6 grams)
Practice: 1.1 oz (30.7 grams)
- **Cartridge Overall Height:** 4.800 inches (121.92mm)
- **Cartridge Overall Weight:** 5.59 oz (158.6 grams)
- **Compatibility:** Sage Deuce, Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Application.** This less lethal ammunition is used to disperse crowds in confined areas or to deny entry into sensitive areas by hostile intruders. Each projectile contains a large volume of micro-pulverized CS powder. When fired the entire CS powder payload is dispensed at the muzzle of the weapon and carried approximately 30 feet beyond the muzzle. The recommended method of firing is to aim approximately 12 inches above ground level and 10 feet in front of the perpetrator. Under no circumstances should the impact of the end cap be above the waist of a perpetrator.

SHIPPING INFORMATION

CS and OC Chemical Cartridges

- **UN Number:** UN0301
- **Proper Shipping Name:** Ammunition Tear Producing
- **Hazard Classification:** 1.4G
- **Quantity Per Package:** 20
- **Total Package Weight:** 12.0 lbs (5.0 kg)
- **Package Type:** 1A2/Y18/S Steel Drum with Lever Lock Lid.
- **Package Dimensions:** 12 inch (304.8mm) diameter X 7-5 Inch height (190.5 mm)

Practice Cartridges

- **UN Number:** UN00012
- **Proper Shipping Name:** Cartridges for weapons, inert projectile
- **Hazard Classification:** 1.4S
- **Quantity Per Package:** 25
- **Total Package Weight:** 11.0 lbs (5.0 kg)
- **Package Type:** Fiberboard Box
- **Package Dimensions:** 11" (279.4mm) long X 9.75" (247.7mm) wide x 6" (152.4mm) high



KO47-40mm

- .60 Caliber
- .31 Caliber

Multi-Ball Ammunition



Features:

- Designed to be used to dissuade intruders from entering sensitive areas or to relocate or disperse unruly groups or hostile intruders by using small caliber rubber or plastic projectiles. These projectiles are intended to impact the perpetrator at waist level and below. The impact will cause severe stinging to the perpetrator.
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage Hi-Lo propulsion system.
- Payload is dispensed at the weapon's muzzle into a buckshot like shotgun pattern
- Two (2) variants are available:
 - .60 Caliber Ball
 - .31 Caliber Ball
- Selection of projectile material and densities are available.
- Cartridge case is full-length aluminum-4.8 inches (121.9mm) long.

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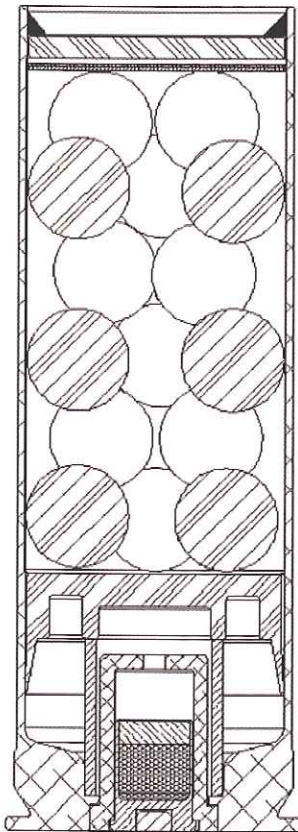


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Technical Data Sheet

Model No	Stock No	Description
KO47/60	100180	Cartridge, KO47 .60 Caliber Multi-Ball Area Impact



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Multi-Ball Area Impact-.60 cal
- **Model Number:** KO47/60
- **Type:** Multi-Ball Area Impact Kinetic Energy Projectiles
- **Velocity:** 288 fps (87.8 mps) Average. Velocity is determined by projectile weight and desired energy.
- **Propellant:** Smokeless
- **Maximum Effective Range:** 50 feet (15.25 meters)
- **Maximum Range:** 100 feet (30.48 meters)
- **Cartridge Case Material:** Aluminum
- **Individual Projectile Weight:** 0.11 oz (3.1 grams)
- **Individual Projectile Hardness:** 70-75 Durometer Shore "A"
- **Total Number of Projectiles per Cartridge:** Twenty four (24)
- **Projectile Material:** Thermoplastic or Rubber
- **Cartridge Overall Height:** 4.800 inches (121.92mm)
- **Cartridge Overall Weight:** 6.28 oz (178.1) grams
- **Compatibility:** Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Deployment: Ricochet fire only.** It is stressed that shot placement is the most important aspect in the deployment and shot placement will determine the extent of injury caused. Individual projectile impacts to the head, face, eyes, neck and ears can cause serious injury or possibly death.

SHIPPING INFORMATION

- **UN Number:** UN0012
- **Proper Shipping Name:** Cartridges for Weapons, Inert Projectile or Cartridges, Small Arms
- **Hazard Classification:** 1.4S
- **Quantity Per Package:** 25
- **Total Package Weight:** 11.0 lbs (5.0 kg)
- **Package Type:** Cardboard-Individual Round and Cardboard Master Pack (24) POP
- **Package Dimensions:** 10-3/4" (27.31 cm) Long x 9-3/4" (24.77 cm) Wide x 6" (15.24) Deep

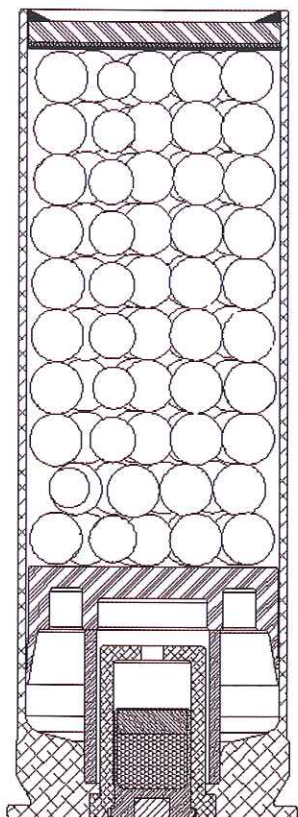


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Technical Data Sheet

Model No	Stock No	Description
KO47/31	100180	Cartridge, KO47 .31 Caliber Multi-Ball Area Impact



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Multi-Ball Area Impact-.31 cal
- **Model Number:** KO47/31
- **Type:** Multi-Ball Area Impact Kinetic Energy Projectiles
- **Velocity:** 325 fps (99.1 mps) Average. Velocity is determined by projectile weight and desired energy
- **Propellant:** Smokeless
- **Maximum Effective Range:** 50 feet (15.25 meters)
- **Maximum Range:** 100 feet (30.48 meters)
- **Cartridge Case Material:** Aluminum
- **Individual Projectile Weight:** 0.012 oz (0.35 grams)
- **Individual Projectile Hardness:** 70-75 Durometer Shore "A"
- **Total Number of Projectiles per Cartridge:** One hundred sixty (160)
- **Projectile Material:** Thermoplastic or Rubber
- **Cartridge Overall Height:** 4.800 inches (121.92mm)
- **Cartridge Overall Weight:** 5.59 oz (158.6 grams)
- **Compatibility:** Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Deployment:** Ricochet fire only. It is stressed that shot placement is the most important aspect in the deployment and shot placement will determine the extent of injury caused. Individual projectile impacts to the head, face, eyes, neck and ears can cause serious injury or possibly death.

SHIPPING INFORMATION

- **UN Number:** UN0012
- **Proper Shipping Name:** Cartridges for Weapons, Inert Projectile or Cartridges, Small Arms
- **Hazard Classification:** 1.4S
- **Quantity Per Package:** 25
- **Total Package Weight:** 10.0 lbs (4.5 kg)
- **Package Type:** Fiberboard Box
- **Package Dimensions:** 10-3/4" (27.31 cm) Long x 9-3/4" (24.77 cm) Wide x 6" (15.24) Deep



KO48-40mm

-Kinetic Energy

-Soft Tip

Baton Ammunition



Features:

- Designed to be used to incapacitate non-compliant aggressive persons.
- Designed to be used in rifled barrel 40mm launchers such as: M203, EGLM and M79.
- Smokeless propellant powered Sage Hi-Lo propulsion system
- Ammunition is re-loadable. Projectiles are reusable multiple times for "Cost Effective" training.
- 77.1 gram spin stabilized projectile.
- Three energy levels are available:
 - Standard Energy
 - Mid-Range Energy
 - Less Energy
- Highly accurate out to 60 meters with high hit probability at longer distances.
- Cartridge case is plastic M212; low probability of officer injury due to perpetrator throw back.

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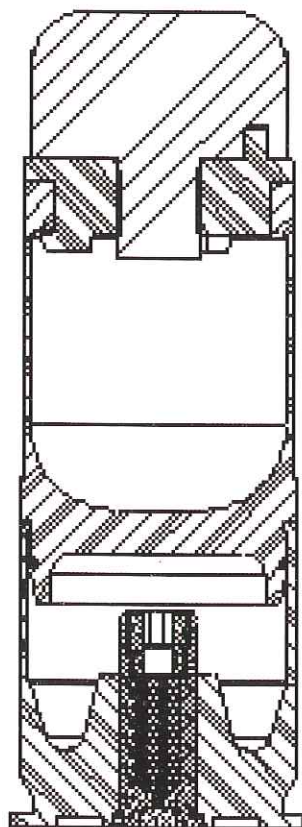


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Technical Data Sheet

Model No	Stock No	Description
KO48ST-PCC	100179P	Cartridge, KO48ST Impact Baton, Standard Energy w/Plastic CC
KO48ST/MR-PCC	100178P	Cartridge, KO48ST Impact Baton, Mid-Range Energy w Plastic CC
KO48ST/LE-PCC	100177P	Cartridge, KO48ST Impact Baton, Less-Energy w/Plastic CC



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 40mm, Soft Tip Impact Baton with plastic cartridge case
- **Model Numbers:** KO48ST-PCC
KO48ST/MR-PCC
KO48ST/LE-PCC
- **Type:** Spin stabilized Kinetic Energy Impact Baton
- **Velocity:** KO48ST-237 fps (72.2 mps)
KO48ST/MR-209 fps (63.7 mps)
KO48ST/LE-170 fps (51.8 mps)
- **Range:** KO48ST-100 meters
KO48ST/MR-40 meters
KO48ST/LE-20 meters
- **Cartridge Case Material:** Plastic, M212
- **Projectile Weight:** 77.1 grams
- **Projectile Material:** "Soft Tip"-Polyurethane ogive, nylon body with integral rotating band
- **Cartridge Overall Height:** 122.43mm
- **Cartridge Overall Weight:** 112.9 grams
- **Compatibility:** Sage Deuce, Sage GL1, Sage GL6, M203, M79 and most weapons chambered for Mil-Spec 40 x 46 NATO ammunition
- **Waterproof:** Yes
- **Deployment:** Most effective ranges are between 1 meter and 100 meters. It is stressed that shot placement is the most important aspect in deployment and shot placement will determine the extent of injury caused. Shots to the head, neck, thorax, heart and spine can cause death or serious injury.

SHIPPING INFORMATION

- **UN Number:** UN0012
- **Proper Shipping Name:** Cartridges for Weapons, Inert
Projectile or Cartridges, Small Arms
- **Hazard Classification:** 1.4S
- **Quantity Per Package:** 25
- **Total Package Weight:** 6.1 kg.
- **Package Type:** Cardboard-Individual Round and Cardboard Master Pack (24) POP
- **Package Dimensions:** 10-3/4" Long, 9-3/4" Wide x 6" Deep



K049-40mm

-Situational Training Sub-Caliber Adaptor Cartridge



Features:

- Designed to be used as a situational training device in conjunction with off-the-shelf .38 non-lethal marking training ammunition.
- Designed to be used in rifled barrel 40mm NATO Mil-Spec launchers such as: M203, EGLM and M79.
- Compatible with:
 - Federal Cartridge Force-on-Force®
 - Simunition FX®
- Accurate out to 10 yards (9.1 m) with good hit probability at longer distances.
- Sage Sub-Caliber Adaptor Cartridge is a onetime purchase which facilitates "Cost Effective" training.
- Cartridge case is full length aluminum anodized "Training Blue" color. The .38 barrel is rifled steel with nylon bushings which center the .38 barrel in the 40mm cartridge case

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Simunition FX is a registered trademark of Simunition, Inc.
Force-on-Force is a registered trademark of Federal Cartridge Company, Inc.



40mm Reloading -Equipment -Components

Reloading Die and Assembly Press Kit:

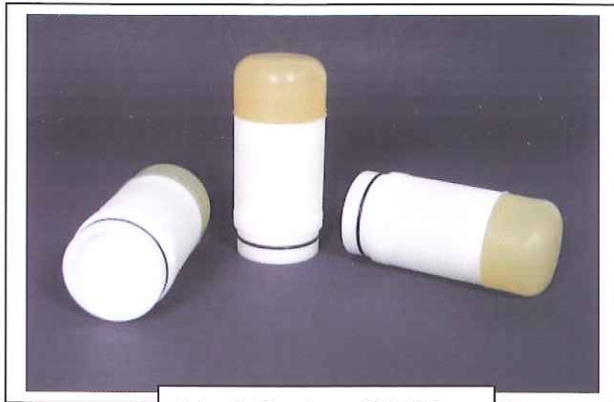


Reloading Die and Assembly Press Kit consists of:

- **Storm Case with special die cut foam kit to accommodate reloading die tools and component parts**
- **Lee Hand Press**
- **Hammer**
- **Plastic Delay Removal Pick**
- **Delay High Pressure Chamber T-Wrench**
- **Reloading Die Tools:**
 - **40mm Shell Holder**
 - **De-Priming Punch Guide and Punch**
 - **Cartridge Case Gauging Ring**
 - **Cartridge Case De-priming Base**
- **Containment Box**
- **Portable Baton Insertion Press**
- **Stock Number: 101253, Model Number: RDK/40E**

Reloading Components:

Replacement Batons:



Stock Number: 101150
Model Number: KO41/B

Replacement Cartridge Cases:



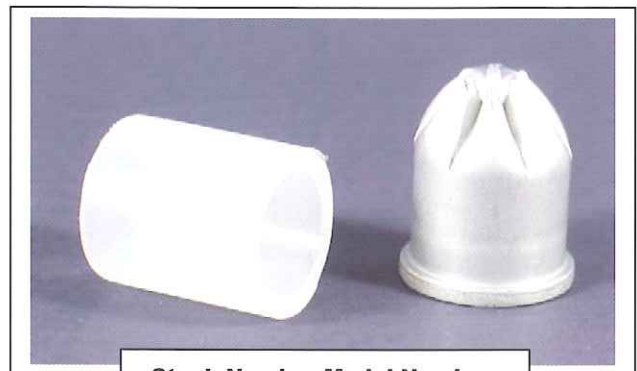
Stock Number: 101151
Model Number: KO41/CC

Replacement High Pressure Chamber:



Stock Number: 101152
Model Number: KO41/HPC

Replacement Propelling Charge & Delay Tube:

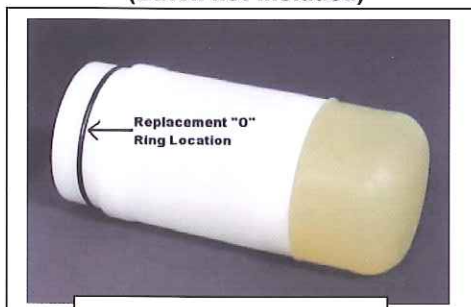


Stock Number-Model Number:
101075-KO41/LESPC
101077-KO41/MRSPC
101076-KO41/SPC

Replacement Baton "O"

Ring:

(Baton not included)



Stock Number: 101154
Model Number: KO41/R

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37mm Reloading -Equipment -Components

Reloading Die Kit:



Reloading Die Kit consists of:

- Storm Case with special die cut foam kit to accommodate reloading die tools and component parts
- Lee Hand Press
- Hammer
- Reloading Die Tools:
 - 37mm Shell Holder
 - De-Priming Punch Guide and Punch
 - Cartridge Case Gauging Ring
 - Cartridge Case De-priming Base
- Stock Number: 101207, Model Number: RDK37/E

Reloading Components:

Replacement Batons:



COMPATIBLE WITH BLACK POWDER PROPELLING CHARGE

Stock Number: 101101

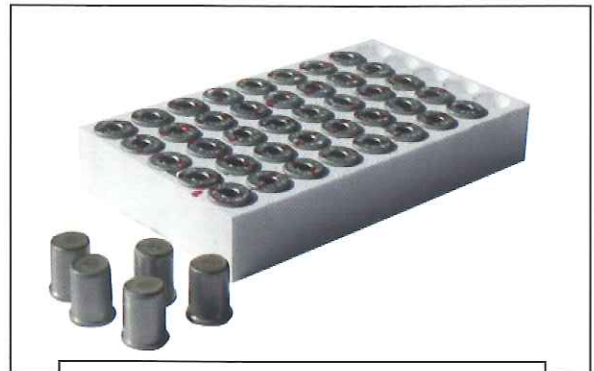
Model Number: KO1-B

COMPATIBLE WITH SMOKELESS PROPELLING CHARGE

Stock Number: 101105

Model Number: KO1-SB

Replacement Propelling Charges:



BLACK POWDER BLEND PROPELLANT

Stock Number-Model Number:

101001-KO1LEPC

101002-KO1PC

SMOKELESS PROPELLANT

Stock Number-Model Number:

101051-KO1LESPC

101052-KO1SPC

*NOTE: BATON OPTIONS

Replacement Cartridge Cases:



Stock Number: 101103
Model Number: KO1-CC

Replacement Baton End Caps:



Stock Number: 101104
Model Number: KO1-EC

Replacement Rotating Bands:



Stock Number: 101102
Model Number: RB-1

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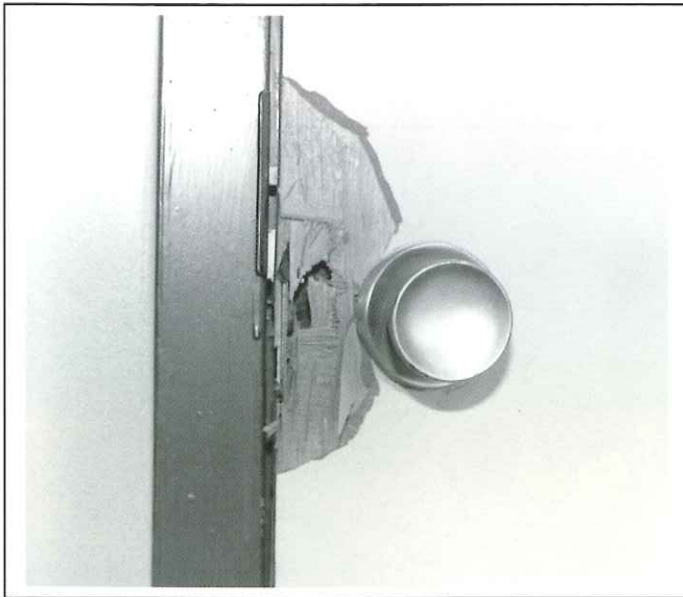


Sage International, Ltd.

LOCKBUSTER

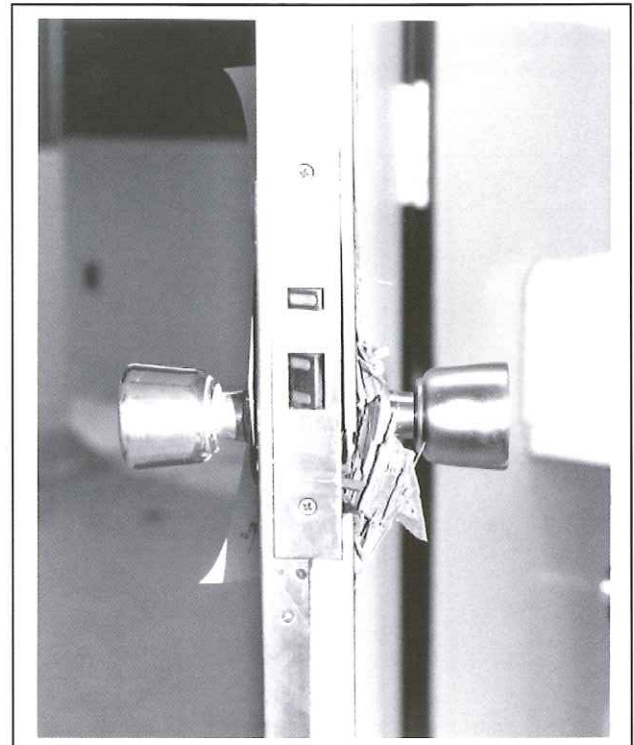
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Door Breaching Ammunition



LOCKBUSTER-entry

LOCKBUSTER-exit



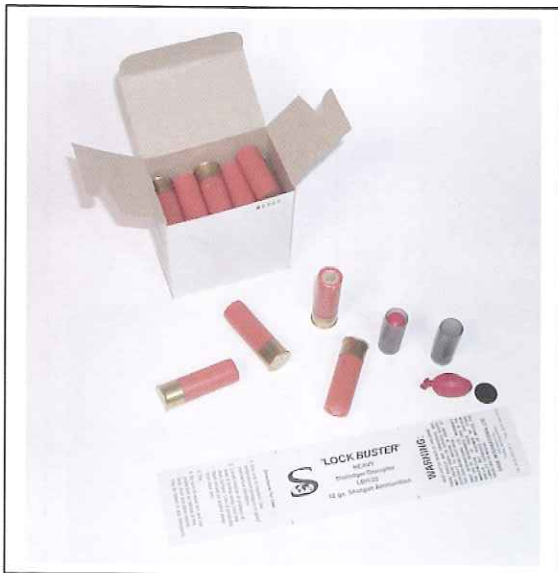
LOCKBUSTER-HEAVY LB-H/NT SPECIFICATIONS

- Use: Heavily clad targets
- Caliber: 12ga
- Cartridge Overall Length: 2.450" (62.2mm)
- Cartridge Case: Plastic 2.750" (69.9mm)
- Crimp: Roll crimp
- Projectile Type: Frangible, un-bonded powder encapsulated in a plastic sleeve and latex bladder
- Projectile Weight: 600 grains (38.9 grams)
- Projectile Composition: Metallic & non-metallic powder
- Projectile Muzzle Velocity: 1250-1300 fps (381-396 mps)
- Pressure: In accordance with SAAMI Standards
- Waterproofing-Standard: None
- Waterproofing-Special: Upon request
- Packaging-Standard: 25 rounds per box, 10 boxes per case
- Packaging-Special: Upon request

LOCKBUSTER-LIGHT LB-L/NT SPECIFICATIONS

- Use: Lightly clad targets
- Caliber: 12ga
- Cartridge Overall Length: 2.450" (62.2mm)
- Cartridge Case: Plastic 2.750" (69.9mm)
- Crimp: Roll crimp
- Projectile Type: Frangible, un-bonded powder encapsulated in a plastic sleeve and latex bladder
- Projectile Weight: 325 grains (21.1 grams)
- Projectile Composition: Metallic powder

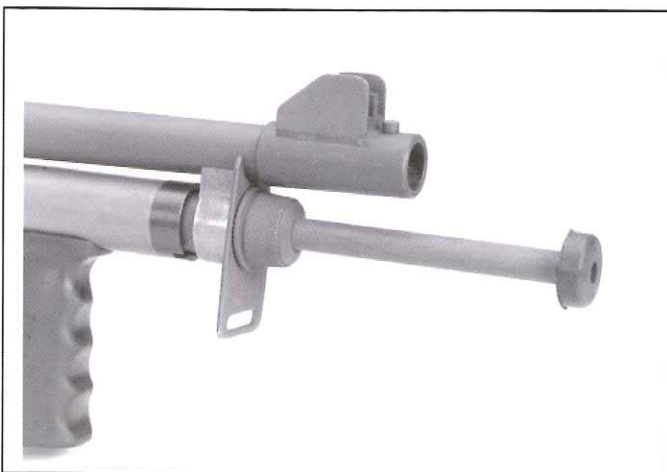
- Projectile Muzzle Velocity: 1375-1400 fps (419.1-426.7 mps)
- Pressure: In accordance with SAAMI Standards
- Waterproofing-Standard: None
- Waterproofing-Special: Upon request
- Packaging-Standard: 25 rounds per box, 10 boxes per case
- Packaging-Special: Upon request



LOCKBUSTER Components & Packaging



LOCKBUSTER Cartridges & Projectiles



Standoff Device for Remington Model 870

- LOCKBUSTER 12ga ammunition is environmentally friendly
- LOCKBUSTER has two loadings to choose from: LB-L/NT-Light Projectile and LB-H/NT Heavy Projectile
- LOCKBUSTER ammunition can be used as a lethal solution in emergency situations
- LOCKBUSTER projectiles are composed of un-bonded metallic powder which greatly reduces over penetration

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SB2-37mm -Irritant CS Smoke Ammunition



Features:

- Designed to be used to deny specific outdoor area occupation and to relocate or move unruly crowds.
- Designed to be used with all 37mm smooth bore and 40mm launchers.
- Smoke emission time: 30 +/- 5 seconds.
- CS Irritant Smoke
- Single source projectile
- Two engagement ranges for both ammunition variants available:
 - Short range-69m (75 yards)
 - Long range-137m (150 yards)
- Smoke projectile has delayed ignition to provide more smoke affect at the desired target.
- Cartridge case is full-length, aluminum-122mm (4.8 inches) long.

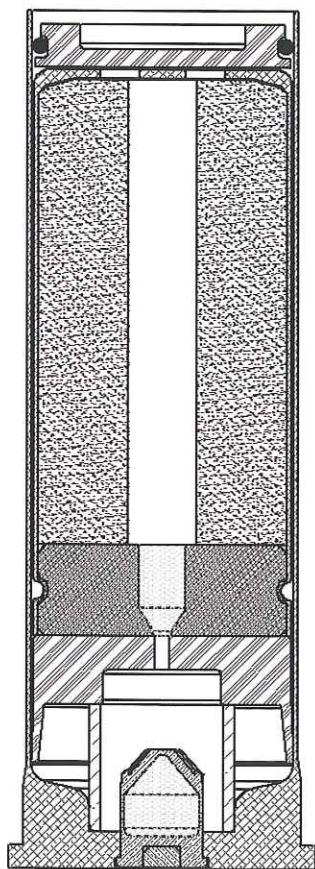
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Technical Data Sheet

Model No	Stock No	Description
SB2SRCS	100181	Cartridge, SB2SRCS, Irritant Smoke, Short Range
SB2LRCS	100182	Cartridge, SB2LRCS, Irritant Smoke, Long Range



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 37mm, Irritant Smoke Short and Long Range, Active Irritant CS
- **Model Numbers:** SB2SRCS, SB2LRCS,
- **Type:** Burning Irritant Smoke, CS and Practice Variants-Single Source Projectile
- **Propellant:** Black powder (sealed in .44 case)
- **Effective Ranges:** Short Range: 70 meters (75 yards)
Long Range: 138 meters (150 yards)
- **Discharge Time:** 30 +/- 5 seconds
- **Cartridge Case Material:** Aluminum
- **Projectile Weight:** 100 grams (3.5 oz)
- **Cartridge Overall Height:** 122mm (4.8 inches)
- **Cartridge Overall Weight:** 207 grams (7.3 oz)
- **Compatibility:** Sage Deuce 37SB, Sage L1, Sage L6, all 37/38mm gas guns and M203, M79 type launchers.
- **Waterproof:** Yes
- **Deployment:** This ammunition is less lethal ammunition used to disperse crowds or to deny entry into sensitive areas by hostile intruders. Each projectile contains pyrotechnic compound of irritant CS smoke. When fired the entire pyrotechnic mixture is ignited through a delay system and is carried to its effective range. Upon landing full ignition is in progress. The recommended method of firing is to elevate the muzzle approximately 20-25 degrees above the horizontal to achieve desired effective range for the specific ammunition type fired.
- **Warning:** Under no circumstance should this ammunition be fired directly at an individual and it should be deployed in accordance with the stated use instructions.

SHIPPING INFORMATION

- UN Number: UN0301
- Proper Shipping Name: Ammunition, Tear Producing
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 5 kg (11.0 lbs)
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter- 304.8 mm (12"), Height- 190.5 mm (7.5")



SB2/3P-37mm

- Multi-Source
- Irritant CS
- Inert Practice

Smoke Ammunition



Features:

- Designed to be used to deny specific outdoor area occupation and to relocate or move unruly crowds.
- Designed to be used with all 37mm smooth bore and 40mm launchers.
- Smoke emission time: 30 +/- 5 seconds.
- Multi- source projectiles: 3 or 5 pellet depending on cartridge case length
- Two (2) ammunition variants available:
 - CS Irritant Smoke
 - Practice-Inert Smoke
- Single engagement range available:
 - Mid-Range-73m (80 yards)
- Smoke projectile has delayed ignition to provide more smoke affect at the desired target.
- Cartridge case lengths available:
 - 122mm. (4.8 inches)
 - 203mm (8.0 inches)

Sage Control Ordnance, Inc.

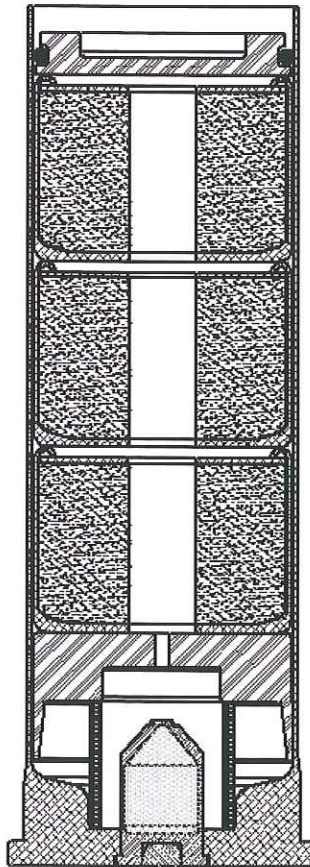
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Technical Data Sheet

Model No:	Stock No:	Description:
SB2MRCS/3P	100505	Cartridge, 37mm Irritant CS Smoke Multi-Source, Three Pellet
SB2MRP/3P	100805	Cartridge, 37mm Practice Smoke, Multi-Source, Three Pellet



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 37mm, Smooth Bore, CS Smoke-Multi-Source
- **Type:** Multi-Source Pyrotechnic Projectile discharging CS irritant smoke or inert smoke
- **Discharge Time:** 30+/- 5 seconds
- **Range:** 73meters (80yards)
- **Emission Ports:** One (1) on each end of the canister-total two (2)
- **Cartridge Case Material:** Aluminum
- **Projectile Weight:** 45 grams (1.6oz)
- **Projectile Material:** Aluminum
- **Cartridge Overall Height:** 122mm (4.8")
- **Cartridge Overall Weight:** 211 grams (7.4oz)
- **Compatibility:** Sage Deuce 37SB, Sage L1, Sage L6, all 37/38mm gas guns and M203, M79 type launchers.
- **Waterproof:** Yes. Sealed primer & plastic o-ring top seal
- **Deployment:** **Deployment:** This ammunition is less lethal ammunition used to disperse crowds or to deny entry into sensitive areas by hostile intruders. Each projectile contains pyrotechnic compound of irritant CS or inert practice smoke. When fired the entire pyrotechnic mixture is ignited through a delay system and is carried to its effective range. Upon landing full ignition is in progress. The recommended method of firing is to elevate the muzzle approximately 20-25 degrees above the horizontal to achieve desired effective range for the specific ammunition type fired.
- **Warning:** Under no circumstance should this ammunition be fired directly at an individual and it should be deployed in accordance with the stated use instructions

SHIPPING INFORMATION

CS Chemical Cartridges

- UN Number: UN0301
- Proper Shipping Name: Ammunition, tear producing
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 6 kg (13.2) lbs
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter- 304.8mm (12") x Height- 190.5mm (7.5")

Practice Cartridges

- UN Number: UN0303
- Proper Shipping Name: Ammunition, smoke
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 6 kg (13.2) lbs
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter- 304.8mm (12") x Height- 190.5mm (7.5")



SB4-37mm

-Screening -Practice

Smoke Ammunition



Features:

- Designed to be used to:
 - Simulate pyrotechnic CS ammunition for training.
 - Screening for tactical operations.
- Designed to be used in all 37mm smooth bore and 40 mm launchers.
- Available color: White
- Smoke emission time: 30 +/- 5 sec.
- Projectile containing payload has delayed ignition to provide more smoke effect at the desired target.
- Engagement range 100m (109 yd)
- Highly accurate at given performance ranges.
- Cartridge case is full-length aluminum - 122mm (4.8 inches).

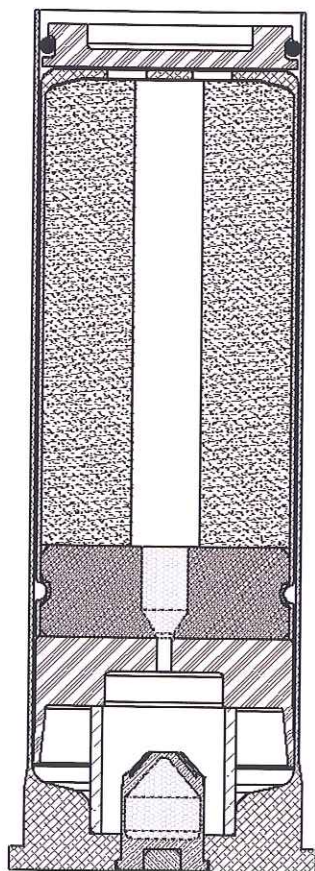
Sage Control Ordnance, Inc.

6340 North Sage Street, Oscoda, MI 48750

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Technical Data Sheet

Model No	Stock No	Description
SB4SR/W	100183	Cartridge, 37MM, SB4SR/W, Practice Smoke, Short Range, White
SB4LR/W	100184	Cartridge, 37MM, SB4LR/W, Practice Smoke, Long Range, White



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 37mm Mid- Range Smoke
- **Model Numbers:** SB4SR/W & SB4LR/W
- **Type:** Burning, Single Source Projectile
- **Propellant:** Black powder (sealed in .44 case)
- **Effective Ranges:** Short Range: 70 meters (75 yards)
Long Range: 138 meters (150 yards)
- **Smoke Color:** White
- **Discharge Time:** 30 +/- 5 seconds
- **Cartridge Case Material:** Aluminum
- **Projectile Weight:** 100 grams (3.5 oz)
- **Cartridge Overall Height:** 122mm (4.8 inches)
- **Cartridge Overall Weight:** 207 grams (7.3 oz)
- **Compatibility:** Sage Deuce 37SB, Sage L1, Sage L6, all 37/38mm gas guns and M203, M79 type launchers.
- **Waterproof:** Yes
- **Deployment:** This ammunition is less lethal ammunition used to disperse crowds or to deny entry into sensitive areas by hostile intruders. Each projectile contains pyrotechnic compound of inert practice smoke. When fired the entire pyrotechnic mixture is ignited through a delay system and is carried to its effective range. Upon landing full ignition is in progress. The recommended method of firing is to elevate the muzzle approximately 20-25 degrees above the horizontal to achieve desired effective range for the specific ammunition type fired.
- **Warning:** Under no circumstance should this ammunition be fired directly at an individual and it should be deployed in accordance with the stated use instructions.

SHIPPING INFORMATION

SB4SR/W and SB4LR/W

- UN Number: UN0303
- Proper Shipping Name: Ammunition, Smoke
- Hazard Classification: 1.4G
- Quantity Per Package: 20
- Total Package Weight: 5 kg.(11.0 lbs)
- Package Type: Steel Drum 1A2/Y18/S
- Package Dimensions: Diameter- 304.8 mm (12") x Height- 190.5 mm (7.5 ")



SB6-37mm

-Chemical Agent

-Muzzle Blast

Ammunition



Features:

- Designed to be used to deny entry into sensitive areas or to relocate or disperse unruly groups or hostile intruders.
- Designed to be used in all 37mm smooth bore and 40mm launchers.
- Payload is dispensed at the weapon's muzzle into a large cloud and travels approximately 30 feet (10m).
- Non-pyrotechnic
- Three (3) variants available:
 - CS Irritant
 - OC Inflammatory
 - Practice-Inert
- Cartridge case is full-length aluminum-122mm (4.8 inches) long.

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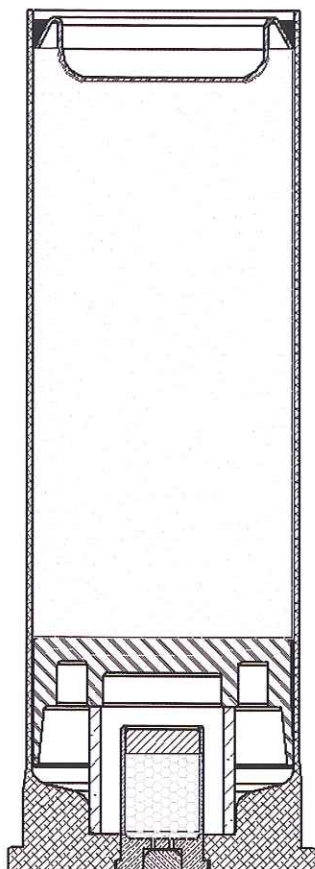
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12/10

Technical Data Sheet

Model No	Stock No	Description
SB6CS	100180	Cartridge, 37MM, SB6CS, Muzzle Blast CS, Irritant
SB6OC	100181	Cartridge, 37MM, SB6OC, Muzzle Blast OC, Inflammatory
SB6P	100182	Cartridge, 37MM, SB6P, Muzzle Blast, Practice



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 37mm, Muzzle Blast
- **Type:** Muzzle Blast: Expulsion of CS, OC or Inert Powder at the muzzle of the launcher
- **Propellant:** Smokeless
- **Maximum Effective Range:** 8 to 10 meters (25 to 30 feet)
- **Cartridge Case Material:** Aluminum
- **Chemical Payload Weight:** CS: 22 grams (0.77 oz)
OC: 6 grams (0.20 oz)
Practice: 22grams (0.77 oz)
- **Cartridge Overall Height:** 122mm (4.8 inches)
- **Cartridge Overall Weight:** 159 grams (5.59 oz)
- **Compatibility:** Sage Deuce 37SB, Sage L1, Sage L6, all 37/38mm gas guns and M203, M79 type launchers.
- **Waterproof:** Yes
- **Deployment:** This ammunition is less lethal ammunition used to disperse crowds in confined areas or to deny entry into sensitive areas by hostile intruders. Each projectile contains a large volume of micro-pulverized CS or OC powder. When fired the entire CS or OC powder payload is dispensed at the muzzle of the weapon and carried approximately 30 feet beyond the muzzle. The recommended method of firing is to aim approximately 12 inches above ground level and 10 feet in front of the perpetrator.
- **Warning:** Under no circumstances should this ammunition be fired directly at an individual and it should be deployed in accordance with the stated use instructions.

SHIPPING INFORMATION

CS and OC Chemical Cartridges

- **UN Number:** UN0301
- **Proper Shipping Name:** Ammunition Tear Producing
- **Hazard Classification:** 1.4G
- **Quantity Per Package:** 20
- **Total Package Weight:** 5.0 kg (12.0 lbs)
- **Package Type:** 1A2/Y18/S Steel Drum with Lever Lock Lid.
- **Package Dimensions:** 304.8mm (12 ") diameter X 190.5 mm (7-5 ") height

Practice Cartridges

- **UN Number:** UN00012
- **Proper Shipping Name:** Cartridges for weapons, inert projectile
- **Hazard Classification:** 1.4S
- **Quantity Per Package:** 25
- **Total Package Weight:** 5.0 kg (11.0 lbs)
- **Package Type:** Fiberboard Box
- **Package Dimensions:** 279.4mm (11") long X 247.7mm (9.75" wide x 152.4mm (6") high



SB7-37mm

▪ .60 Caliber

▪ .31 Caliber

Multi-Ball Ammunition



Features:

- Designed to be used to dissuade intruders from entering sensitive areas or to relocate or disperse unruly groups or hostile intruders by using small caliber rubber or plastic projectiles. These projectiles are intended to impact the perpetrator at waist level and below. The impact will cause severe stinging to the perpetrator.
- Designed to be used in all 37mm smooth bore and 40mm launchers.
- Payload is dispensed at the weapon's muzzle into a buckshot like shotgun pattern
- Two (2) variants are available:
 - .60 Caliber Ball
 - .31 Caliber Ball
- Selection of projectile material and densities are available.
- Cartridge case is full-length aluminum- 122mm (4.8 inches) and 203mm (8.0 Inches) long.

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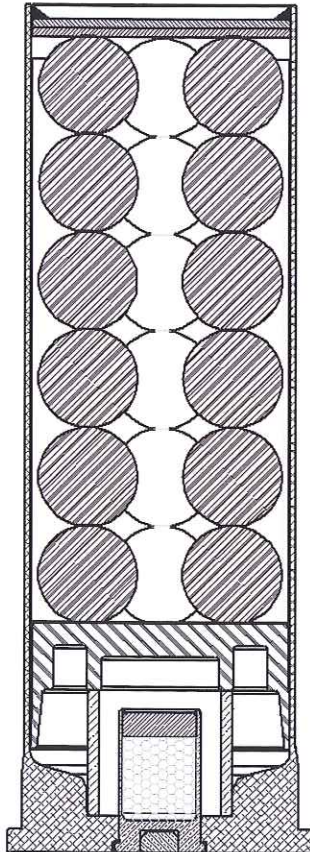
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12/10

Technical Data Sheet

Model No	Stock No	Description
SB7/60	100180	Cartridge, SB7, 37mm, .60 Caliber Multi-Ball Area Impact



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 37mm, Multi-Ball Area Impact-.60 cal
- **Model Number:** SB7/60
- **Type:** Multi-Ball Area Impact Kinetic Energy Projectiles
- **Velocity:** 88 mps (288 fps) average. velocity is determined by projectile weight and desired energy.
- **Propellant:** Black Powder
- **Maximum Effective Range:** 15 meters (50 feet)
- **Maximum Range:** 31 meters (100 feet)
- **Cartridge Case Material:** Aluminum
- **Individual Projectile Weight:** 3.1 grams (0.11 oz)
- **Individual Projectile Hardness:** 70-75 Durometer Shore "A"
- **Total Number of Projectiles per Cartridge:** Twenty four (24)
- **Projectile Material:** Thermoplastic or Rubber
- **Cartridge Overall Height:** 122mm (4.8 inches)
- **Cartridge Overall Weight:** 178 grams (6.28 oz)
- **Compatibility:** Sage Deuce 37SB, Sage L1, Sage L6, all 37/38mm gas guns and M203, M79 type launchers.
- **Waterproof:** Yes
- **Deployment: Ricochet fire only.** It is stressed that shot placement is the most important aspect in the deployment and shot placement will determine the extent of injury caused. Individual projectile impacts to the head, face, eyes, neck and ears can cause serious injury or possibly death.

SHIPPING INFORMATION

SB7/60

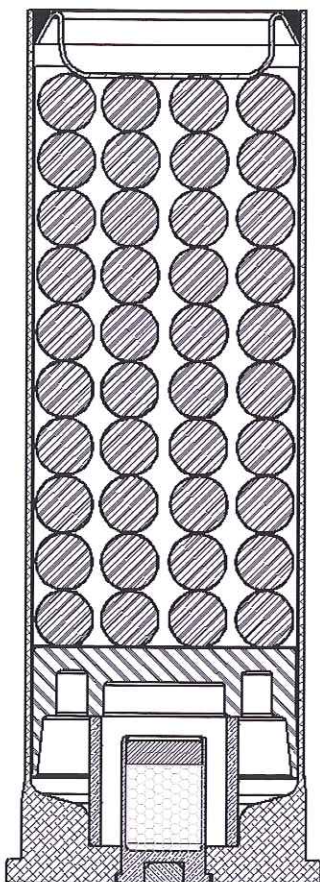
- UN Number: UN0339
- Proper Shipping Name: Cartridges for weapons, inert projectile or cartridges, small arms
- Hazard Classification: 1.4C
- Quantity Per Package: Fiberboard Box-25 per box or Steel Drum-20 per drum
- Total Package Weight: 5 kg (11 lbs)
- Fiberboard Box Dimensions: Length- 279.4mm (11 inches)
Width- 241.3 (9.5" mm)
Height- 152.4mm (6 inches)
- Steel Drum Dimensions: Diameter- 305 mm (12") x Height- 191 mm (7.5 ")



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Technical Data Sheet

Model No:	Stock No:	Description:
SB7/31	100501	Cartridge, 37MM, SB7/31 Multi-Ball Impact-.31 Caliber



PHYSICAL & PERFORMANCE CHARACTERISTICS

- **Description:** Cartridge, 37mm, .31 Caliber Multi-Ball Impact
- **Type:** Multi-pellet muzzle dispersion
- **Velocity:** 100.6 mps (330 fps)
- **Maximum Effective Range:** 15.2 meters (50 feet)
- **Cartridge Case Material:** Aluminum
- **Individual Projectile Weight:** 0.37 grams (0.013oz)
- **Number of Projectiles per Cartridge:** 106 (approximately)
- **Projectile Material:** Plastic or Rubber
- **Cartridge Overall Height:** 121.9mm (4.8 inches")
- **Cartridge Overall Weight:** 124.7 grams oz (4.4)
- **Compatibility:** Sage Deuce 37SB, Sage L1, Sage L6, all 37/38mm gas guns and M203, M79 type launchers.
- **Waterproof:** Yes
- **Deployment:** SB7/32 Multi-Ball Area Impact Cartridge is a muzzle initiated wide dispersion ammunition variant. This ammunition type is particularly useful in dispersing crowds, denying access into confined areas such as hallways and creating a diversion to a specific location.
- **Warning:** Particular attention should be paid to use and impact location on a perpetrator. By its nature the SB7/31 projectiles do not possess the inherent accuracy of other SAGE ammunition types. The lack of projectile stabilization requires that care must be exercised in the use of this ammunition type. Eye, ear and other bodily damage can occur if impacted with these projectiles. Skip firing is recommended for employment of this ammunition type.

SHIPPING INFORMATION

SB7/31

- UN Number: UN0339
- Proper Shipping Name: Cartridges for weapons, inert projectile or cartridges, small arms
- Hazard Classification: 1.4C
- Quantity Per Package: Fiberboard Box-25 per box or Steel Drum-20 per drum
- Total Package Weight: 5 kg (11 lbs)
- Fiberboard Box Dimensions: Length- 279.4mm (11 inches)
Width- 241.3 (9.5" mm)
Height- 152.4mm (6 inches)
- Steel Drum Dimensions: Diameter- 305 mm (12") x Height- 191 mm (7.5 ")



SB9-37mm

-Situational Training

Sub-Caliber Adaptor Cartridge



Features:

- Designed to be used as a situational training device in conjunction with off-the-shelf .38 less-lethal marking training ammunition.
- Designed to be used in all 37mm smooth bore launchers.
- Compatible with:
 - Federal Cartridge Force-on-Force®
 - Simunition FX®
- Accurate out to 10 yards (9.1 m) with good hit probability at longer distances.
- Sage Sub-Caliber Adaptor Cartridge is a onetime purchase which facilitates "Cost Effective" training.
- Cartridge case is full length aluminum anodized "Training Blue" color. The .38 barrel is rifled steel with nylon bushings which centers the .38 barrel in the 37mm cartridge case chamber

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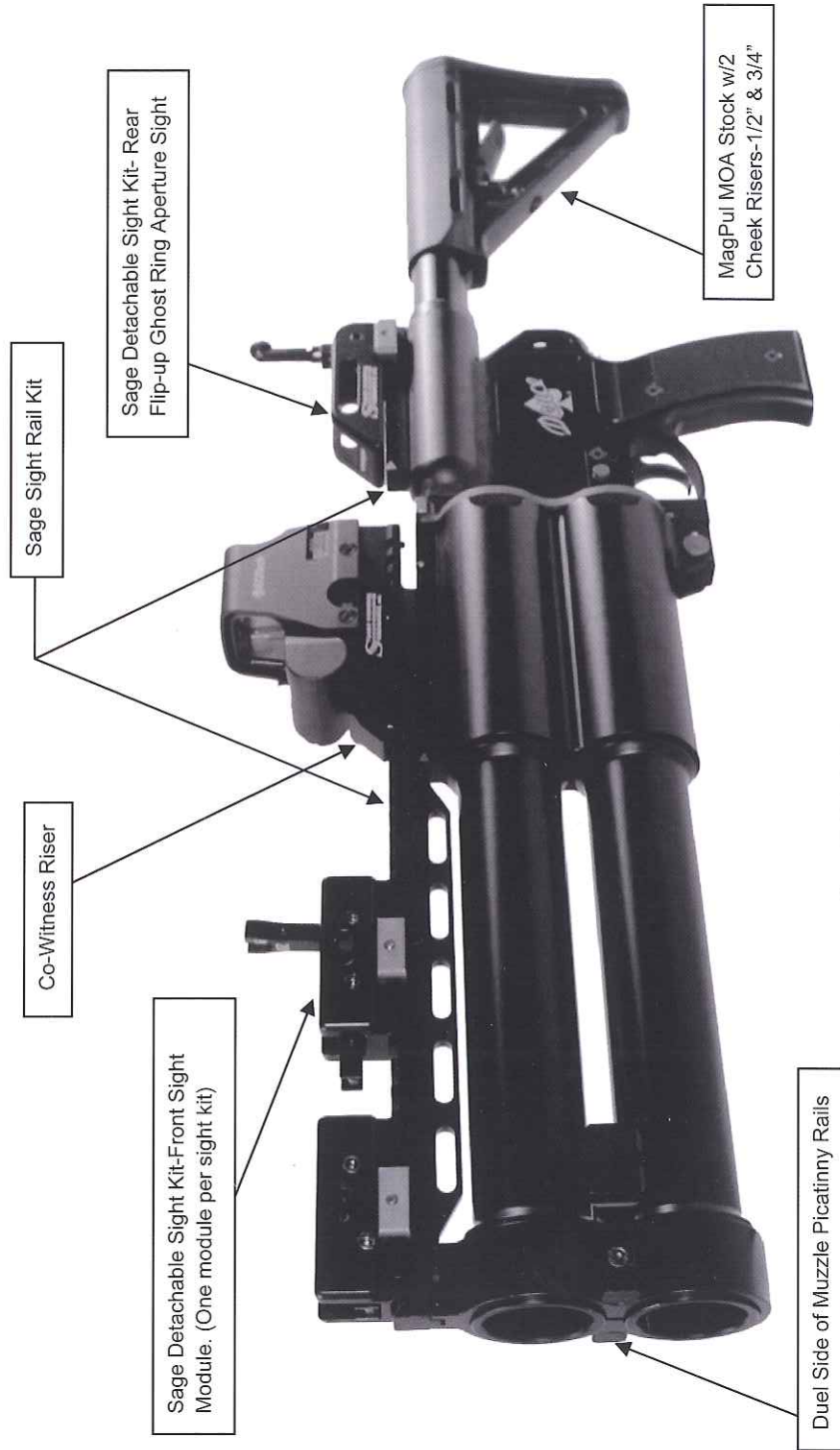
12/10

Simunition FX is a registered trademark of Simunition, Inc.

Force-on-Force is a registered trademark of Federal Cartridge Company, Inc.



Revolution



Note: EOTech Sight is not included as part of the Deuce Revolution configuration package

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Projectile Launcher System



Standard Deuce package includes: Deuce weapon with barrel/caliber selection, barrel duo-block integral Picatinny Rail section, two barrel mounted Picatinny Rails, cleaning brush and operator's manual

The Deuce Over/Under Launcher System has three (3) caliber variants available with:

- 37mm Sage rifled barrels
- 40mm x 46 NATO rifled barrels
- 37mm smooth bore barrels



The Deuce Stock System encompasses the following features;

- Five (5) position adjustable length of pull-standard
- Side folding either to the left or the right-optional accessory

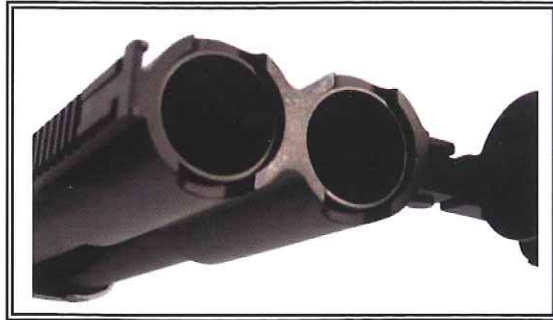


EOTech Holographic Weapon Sights and Folding Stocks are available at additional cost



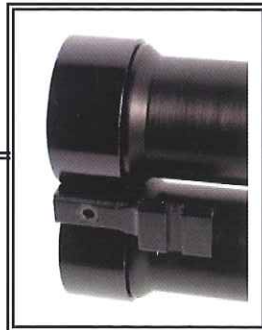
Deuce's physical characteristics are as follows:

- Weight: 6 lbs 6 ounces (2.95 Kg)
- Width at widest point: 2.3 inches (5.7 cm)
- Overall length with stock open and five position butt full collapsed: 26.3 inches (64.5 cm)
- Overall length with stock open and five position butt fully extended: 29.5 inches (74.9 cm)
- Overall length with stock closed: 18.5 inches (47.0 cm)



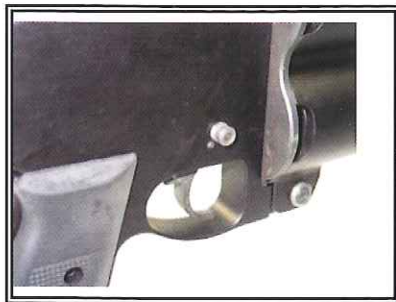
The Deuce action has the following specifications and features:

- Proven break open action with steel latching system
- Steel standing breach face
- The top barrel fires first followed by the lower barrel when the second shot is taken. If the launcher is fired once and opened the top barrel will be reset to fire first.



The Deuce has several locations for Picatinny Rails; they are as follows:

- Located and integrated into the top of the extruded duo-block is a 3.8 inch (9.5 cm) Picatinny Rail
- Located on either side of the front barrel band are two removable 1.0 inch (2.5 cm) Picatinny Rails



The Deuce's safety is:

- Conveniently located just above the trigger
- A push type safety system very similar in operation and location to several tactical shotguns manufactured throughout the world



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